Appl. No. 10/567,867

Resp. dated November 12, 2007

Reply to Office action of Oct. 29, 2007

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended/withdrawn):1. A method of manufacturing a filter—(10) for retaining a substance (14)—originating from a radiation source—(12), which the filter comprises—comprising a thin layer—(18) which is transparent to extreme ultraviolet and/or soft X-ray radiation—(16), characterized in that wherein the filter (10) is resistant to high temperatures.

Claim 2 (currently amended/withdrawn): A—The method as claimed inof claim 1, characterized in that wherein first the thin layer—(18) and subsequently a support structure (20) for the thin layer—(18) are manufactured, or in reverse order, the filter—(10) being manufactured such that the thin layer—(18) is connected to the support structure—(20) in a high-temperature-resistant manner.

Claim 3 (currently amended/withdrawn): A—The_method as claimed inof claim 1, characterized—in thatwherein at least the thin layer—(18) is manufactured by means of a chemical and/or physical deposition process.

Claim 4 (currently amended/withdrawn): A—The method as claimed inof claim 1, characterized in that wherein at least the thin layer—(18) comprises preponderantly zirconium, niobium, molybdenum, silicon, zirconium carbide (ZrC), zirconium dioxide, silicon carbide (SiC), silicon nitride (Si $_3$ N $_4$), boron nitride (BN), or a combination thereof.

Claim 5 (currently amended/withdrawn): A-The method as claimed inof claim 2, characterized in that wherein the thin layer—(18) and the support structure—(20) are manufactured as an integral whole.

Claim 6 (currently amended/withdrawn): A-The method as claimed inof claim 1, characterized in that wherein a layer thickness—(22) for the thin layer—(18) of approximately 100 nm is achieved.

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Claim 7 (currently amended/withdrawn): A—The method as claimed inof claim 2, characterized in that wherein—that the support structure—(20) comprises preponderantly zirconium, niobium, molybdenum, silicon, zirconium carbide (ZrC), zirconium dioxide, silicon carbide (SiC), silicon nitride (Si.sub.3N.sub.4), boron nitride (BN), or a combination thereof.

Claim 8 (currently amended/withdrawn): A—The method as claimed inof claim 2, characterized in that wherein a thickness—(24) of approximately 1 .mu.m up to 1 mm is adjusted for the support structure—(20).

Claim 9 (currently amended/withdrawn): A—The method as claimed inof claim 2, characterized in that wherein a material having a melting point of at least 1300.degree.

C. is chosen for the thin layer—(18) and the support structure—(20).

Claim 10 (currently amended/withdrawn): A The method as claimed inof claim 2, characterized in that wherein the

support structure (20) is constructed in the form of strips, for example forming a grid structure or honeycomb-type woven structure (26).

Claim 11 (currently amended/withdrawn): A—The method as claimed inof claim 10, characterized in that wherein the woven structure—(26) is generated by means of erosion, laser processing, or photochemical etching.

Claim 12 (currently amended: A device for retaining a substance—(14) originating from a radiation source—(12) by means of using a filter—(10), which the filter—(10) comprisinges a thin layer—(18) that is transparent to extreme ultraviolet and/or soft X-ray radiation—(16), characterized in that wherein the filter—(10) is resistant to high temperatures.

Claim 13 (currently amended): A—The device as claimed inof claim 12, characterized in thatwherein the thin layer—(18) is connected to a support structure—(20) in a high-temperature-resistant manner, or in that the thin

layer—(18) and the support structure—(20) can be manufactured as an integral whole.

Claim 14 (currently amended): A—The device as claimed inof claim 13, characterized in thatwherein a material used for the thin layer—(18) and the support structure (20) has a melting point of at least 1300.degree. C.

Claim 15 (currently amended): A—The device as claimed inof claim 12, characterized in that wherein at least the thin layer—(18) can be manufactured by means of a chemical and/or physical deposition process.

Claim 16 (currently amended): A—The device as claimed inof claim 12, characterized in that wherein at least the thin layer—(18) comprises preponderantly zirconium, niobium, molybdenum, silicon, zirconium carbide (ZrC), zirconium dioxide, silicon carbide (SiC), silicon nitride (Si $_3N_4$), boron nitride (BN), or a combination thereof.

Claim 17 (currently amended): The A device as claimed inof claim 12, characterized in that wherein the thin

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layer—(18) has a layer thickness—(22) of approximately 100 nm.

Claim 18 (currently amended): A—The device as claimed inof claim 13, characterized in that wherein the support structure—(20) has a thickness—(24) of approximately 1.mu.m to 1 mm.

Claim 19 (currently amended): A—The device as claimed inof claim 13, characterized in that wherein the support structure—(20) can be is constructed in the form of strips, for example in the form of a grid type or honeycomb type woven structure—(26).

Claim 20 (currently amended): A The device as claimed inof claim 19, characterized in that wherein the woven structure (26) can be is obtained by means of erosion, laser processing, or photochemical etching.

Claim 21 (currently amended): The use of the filter (10) as claimed in claim 12 in aAn apparatus device—for EUV lithography_comprising the device of Claim 12.

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Claim 22 (currently amended): The <u>apparatus for EUV</u>

<u>lithographyuse as claimed in claim 21, characterized in that wherein the a filter—(10) of the device is operated at a temperature of approximately 900.degree. C. to approximately 1300.degree. C.</u>

Claim 23 (currently amended): The use asapparatus for EUV lithography claimed in claim 21, characterized in that wherein the temperature for the filter—(10) is adjustable such that the retained substance—(14) evaporates at the—a prevailing pressure.

Claim 24 (currently amended): The use as apparatus claimed in claim 21, characterized in that wherein the temperature for the filter—(10) is adjustable such that the retained substance—(14) evaporates from the filter—(10) at a rate higher than that at which it is deposited thereon.

Claim 25 (currently amended): The use as apparatus claimed in claim 21, characterized in that wherein a foil

trap—(28) is additionally arranged between the radiation source—(12) and the filter—(10).

Claim 26 (currently amended): The use as apparatus claimed in claim 21, characterized in that wherein the filter—(10) seals off the radiation source—(12) in the form of a window.

Claim 27 (currently amended): The use as apparatus claimed in claim 26, characterized in that wherein the substance (14) in the radiation source (12) reaches a partial pressure of approximately 10 Pa.

Claim 28 (new): The device of claim 19, wherein the strips are in the form of a grid-type or honeycomb-type woven structure.